



State of Utah

DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL, GAS AND MINING

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April 14, 1989

Mr. Larry Sower
General Manager
Crystal Peak Minerals Corporation
P.O. Box 100
Milford, Utah 84751


Dear Mr. Sower:

Re: DOGM Permit Review, 1989 NOI Permit Revision, Sevier Lake Project,
M/027/008-89(1), Milard County, Utah

On The Division has completed its review of your January 9, 1989, request to revise the approved Notice of Intention (NOI) for the Sevier Lake Project. This letter is forwarded to you to notify you of the outstanding technical deficiencies which must be resolved prior to issuance of DOGM approval:

R613-004-113 Surety

On March 31, 1988, the Board approved the surety amount of \$53,000 for the reclamation of the disturbance to date. This amount includes the costs required for the deliberate flooding of the pond complex using the existing pumps. The operator indicates that the borrow area and water wells have been partially reclaimed. The current reclamation liability is \$51,000 (\$46,100 plus contingency) in 1989 dollars.

The 1989 construction will disturb an additional 24.1 acres (not associated with the solar pond complex construction of the dikes and ditches). This disturbance is 22.6 acres for the Salt wash plant and storage pad, and 1.5 acres for the buried process water line.

Total required surety -- including 1988 year-to-date disturbance -- is \$137,000 (1994 dollars). The BLM is holding a \$53,000 bond; therefore, an additional \$84,000 is needed from Crystal Peak. A reclamation estimate is attached.

R613-004-106.6 and 107.5

The operator needs to describe a topsoil collection, protection and redistribution plan for the Salt Wash Plant and Product Stockpile area. Viable soil material must be removed from the area before construction. The material must be stockpiled and stabilized until reused for reclamation. A variance should be requested for this area if no soil material is to be stockpiled.

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R613-004-111.13

In reference to the Salt Wash Plant and Product Stockpile area, the operator needs to describe how revegetation will be obtained. Residual salts, from stored product, must be removed before reseeding. How will this be accomplished?

General Comments

The operator plans to install a temporary railcar loadout at the Black Rock Siding on the Union Pacific railroad. A permanent facility will be constructed in 1991. The Division has determined this to be an offsite facility which will not require permitting through this agency.

Utah Power and Light will construct a 46 KV power transmission line from the Milford substation to the plant site. This line will be 26.5 miles long and involve an area of 96 acres (30 foot right-of-way). This project is not scheduled for 1989. The Division will temporarily defer its permitting decision on this proposal until the year of its scheduled construction.

If possible, please provide a response to these technical concerns by May 20, 1989. Please contact me or D. Wayne Hedberg or my staff should you have any questions or concerns regarding this review. Thank you for your patience and cooperation in completing this permitting action.

Sincerely,



Lowell P. Braxton
Administrator,
Minerals Resource Development
and Reclamation Program

DWH/jb

Attachment

cc: Michael Jackson, BLM, Warm Springs Resource Area
Jerry Goodman, BLM, Richfield District Office
Jerry Mansfield, State Lands
Allen Vance, BLM, Utah State Office
Minerals Team

MN3/68-69

Reclamation Estimate for Crystal Peak Minerals Corporation
Sevier Dry Lake Project M/027/008 Page 1 of 2

Prepared By
Utah State Division of Oil, Gas and Mining
March 06, 1989

Description	Quantity	Unit	\$/Unit	Total Cost (\$)
Pond System Reclamation (a)				
Pumping into Ponds to Breach Dikes		Lump Sum		17,500
Labor and Vehicles		Lump Sum		20,000
Subtotal				37,500
1987 and 1988 Construction Reclamation				
Borrow Area - Grade for Uniformity		Lump Sum		1,100
Borrow Area - Revegetate		Lump Sum		6,800
Plug Water Wells		Lump Sum		5,000
Campsite		Lump Sum		3,500
Subtotal				16,400
Less Completed Reclamation (b)				8,800
Total Reclamation Cost for pre-1989 Disturbances (1988 dollars) (c)				45,100
			(1989 dollars)	46,100
Salt Wash Plant and Facilities Reclamation				
Remove Conveyors and Structures	1,200	Feet	3.50	4,200
Remove Hoppers, Screens, Pumps, Etc.		Lump Sum		3,000
Remove Trash	22.6	Acres	100	2,260
Rip Salt Pad (1 foot depth)	22.6	Acres	172	3,890
Haul Salt Pad to Nearest Pond	36,500	Cubic Yards	0.66	23,920
Grade for Uniformity	22.6	Acres	323	7,300
Replace Topsoil	18,230	Cubic Yards	0.80	14,580
Revegetate	22.6	Acres	318	7,190
Subtotal				66,340
Process Water Line Reclamation				
Revegetate	1.5	Acres	318	480
Total 1989 Proposed Disturbance				66,820
Totals (Disturbances through 1989)				112,920
Add Contingency (10%)				11,290
TOTAL RECLAMATION COST (1989 Dollars)				124,210
TOTAL RECLAMATION COST (1994 Dollars) @ 1.93% Annual Inflation				137,000

sprinkle w/ water from mine & leach & drain back to lake bed.

done?
sum over to BLM?

est. 2000??
@ 100 Aft. H₂O
1 pad @ 1 ft deep

Reclamation Estimate for Crystal Peak Minerals Corporation
Sevier Dry Lake Project M/027/008

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- (a) This amount includes the reclamation of constructed and proposed dikes and ditches in the solar pond complex. When all facilities are constructed, these figures will be reviewed.
- (b) The borrow area was apparently partially reclaimed. Also, some of the water wells may have been reclaimed. The Division will need to verify this work during a field visit.
- (c) The amount of surety required for this work (\$53,000) was accepted by the Board of Oil, Gas and Mining on March 31, 1988.

Cost Parameters Used

988B Wheel Loader (O&O)	165	\$/hour
769C Off-Highway Truck (O&O)	100	Cubic Yards/hour
D-8 Dozer (O&O)	160	\$/hour
Labor Only	24	\$/hour
Trash Removal	100	\$/acre
Farm Tractor (O&O)	67	\$/hour
Speed	4	mph
Width of Pass	6	feet

Revegetation Cost per Acre	Quantity	Unit	\$/Unit	Total Cost (\$)
Bare Costs				
Seed Mix	24.9	Pounds	9.92	247
Application Costs				
Seed Mix (using drill seeder)	0.5	Hours	95	48
Scarify (tractor with chain)	0.3	Hours	67	23
Subtotal				71
Total Revegetation Cost per Acre				318